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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,701	12/27/2001	Kayshav Dattatri	020581-000300US	8593

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EXAMINER
FERNANDES, CHERYL M

ART UNIT	PAPER NUMBER
2163	

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 December 2004</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-11</u> is/are pending in the application.

    4a) Of the above claim(s) <u>7</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-6 and 8-11</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>27 December 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-6 and 8-11 in the reply filed on October 25, 2004 is acknowledged.

Claim 7 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 25, 2004.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because

It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either on an application data sheet or supplemental oath or declaration.

It does not identify the mailing address of each inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

Specification

3. The disclosure is objected to because of the following informalities:

- The Brief Description of Drawings does not address Fig. 3A-B.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claim 1 recites the following limitations:

- "the tracking process", in the 2nd paragraph of the claim.

There is insufficient antecedent basis for this limitation in the claim.

Due to the 112 2nd paragraph rejection above, the claims have been treated on

their merits as best understood by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by

US Patent Number 6,052,695 issued to Abe et al (hereafter Abe).

Referring to claim 1, Abe discloses a method for keeping a copy of data

(Abstract), wherein a primary database server ('coordinator server', Fig. 1, element 1a)

is coupled to a primary data store ('local database', Fig. 1, element 16), wherein the

primary database server receives database events ('transactions', col. 1, lines 24-40;

Abstract) from an external source ('Application Program (AP)', Fig. 1, element 12; col.

10, lines 57-63) and generates signals for accessing the primary data store ('signal

transmission manager', Fig. 1, element 11; col. 10, lines 13-16), the method comprising:

-   using the tracking process to store at least a portion of the received database

    events in an event log ('log', Fig. 1, element 18; col. 10, lines 36-47); and

-   using the event log to update a secondary data store ('local database', Fig. 1,

    element 16; col. 10, lines 36-52).

Referring to claim 1, 1st paragraph, the recitation of a primary data store has not

been given patentable weight because the recitation occurs in the preamble. A

preamble is generally not accorded any patentable weight where it merely recites the

purpose of a process or the intended use of a structure, and where the body of the

claim does not depend on the preamble for completeness but, instead, the process

steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190

USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481

(CCPA 1951). Moreover, the examiner respectfully submits that the claims, as such, do

not require that the primary data store function in particular manner. Furthermore, the examiner respectfully asserts that the claims, as such, do not even require that the primary data store be functionally related to or used with the limitations in the body of the claim.

Referring to claim 4, Abe discloses that the external source includes an application program ('Application Program (AP)', Fig. 1, element 12; col. 10, lines 57-63).

Referring to claim 5, Abe discloses that the application program is part of a messaging network (col. 9, lines 48-63; Fig. 1; col.10, lines 57-63).

6.　　Claims 1, 4, 6, and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent Number 5,423,037 issued to Hvasshovd.

Referring to claim 1, Hvasshovd discloses a method for keeping a copy of data ('replica', Abstract), wherein a primary database server ('multiprocessor database server', Fig. 1, element 100) is coupled to a primary data store ('data processor node 0', col. 2, lines 15-24[1]; see Node 0 in Fig. 4; primary replica in database table, see Fig. 4, col. 4, lines 55-68), wherein the primary database server receives database events from an external source (queries and transaction requests received from requestor systems, Fig. 1, element 110; col. 3, lines 31-35; col. 4, lines 20-25) and generates signals for

accessing the primary data store ('communication channels and communication

coprocessor', col. 4, lines 20-25; Fig. 3, elements 140 and 106), the method comprising:

- using the tracking process to store at least a portion of the received database

  events in an event log ('transaction log', Abstract; col. 5, lines 20-47); and

- using the event log to update a secondary data store ('hot standby replica at

  node 4 updated', Abstract; col. 5, lines 45-50; Fig. 4[2]; col. 10, lines 48-59).

Referring to claim 8, Hvasshovd discloses a method for maintaining copies of

data ('primary and standby replicas', Abstract), wherein an application program

('requestor systems', Fig. 1, element 110) sends events to a database server (queries

and transaction requests send from requestor systems to a 'multiprocessor database

server', Fig. 1, element 100; col. 3, lines 31-35; col. 4, lines 20-25), wherein the

database server generates database transactions (col. 3, lines 31-35) to modify a

primary copy of data ('hot standby replica', at node 4 updated', Abstract; col. 5, lines 45-

50; Fig. 4), the method comprising:

- storing a record of the events as an original event log ('transaction log',

  Abstract; col. 5, lines 20-47); and

- using the original event log to maintain multiple copies of the data (Abstract;

  col. 2, lines 23-30; replicas are maintained in Fig. 4-5; col. 10, lines 29-34).

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[1] Each node connected to the database server contains its own secondary memory, that contains
transactions (see Fig. 3, element 136; col. 4, lines 25-35).
[2] The primary and standby replicas are stored on different nodes so that when the primary replica at one
node changes, the standby replica located at another node is updated using the transaction log.

Referring to claim 4, Hvasshovd discloses that the external source includes an application program ('requestor systems', Fig. 1, element 110).

Referring to claim 6, Hvasshovd discloses updating multiple secondary data stores (nodes 0 and 4 are updated because they contain related replicas, see Fig. 4; col. 5, lines 20-55).

Referring to claim 9, Hvasshovd discloses transferring at least a portion of the record of events to multiple data sites (allocation of records among different nodes, Abstract; Fig. 1 and 4), wherein each data site includes a data store ('table fragments', Fig. 4), wherein each data store includes at least a portion of the data (Abstract; col. 5, lines 20-55), and using the transferred at least a portion of the record of events to update the data at the data stores (col. 5, lines 44-55).

Referring to claim 10, Hvasshovd discloses that at least one data site receives events from two or more data sites ('one node can have between 2 to 4 replicas', col. 5, lines 20-28, Fig. 4; col. 5, line 56- col. 6, line 19, see nodes 1, 5, and 6 in Fig. 5).

Referring to claim 11, discloses Hvasshovd that a secondary data site receives a series of events in an order different from the order of events in the original event log, and using the received different-order events to update data at the secondary data site (The node containing a hot standby replica read and repeat (update) operations

represented by the log records according to whether they have been already performed

or not, col. 5, lines 41-55).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hvasshovd as applied to claim 1 above, and further in view of US Publication Number

2004/0073887 by Leymann et al (hereafter Leymann).

Referring to claims 2 and 3, Hvasshovd discloses all of the above claimed

subject matter, however remains silent as to excluding some of the events from being

stored in the event log (claim 2), and furthermore, allowing a user to define which

events are excluded (claim 3).

However, Leymann teaches analogous art that includes excluding some events

from being stored in an event log (claim 2) (Abstract; para. 2, and 5-8), and furthermore,

allowing a user to define which events are excluded (claim 3) (para. 8, 18, 19, and 25-

28).

It would have been obvious to one of ordinary skill in the art at the time that the

invention was made to modify Hvasshovd to include excluding some events from being

stored in an event log and allowing a user to define which events are excluded, as

taught by Leymann.

The ordinary skilled artisan would have been motivated to modify Hvasshovd per

the above for the purpose of collecting only those received requests that are of interest

(Leymann, para. 8).

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

The following patents or publications are cited with respect to the updating of remote

replica database copies:

-   US Patent Number 6,421,670 issued to Fourman.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Cheryl M Fernandes who can be reached on (571) 272-

4018. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Safet Metjahic can be reached on (571) 272-4023.   The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

January 7, 2005
CMF

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